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ZU-406

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Hiroshi MASE, et al.

Serial No.: Unassigned

Group:

Filed: Concurrently

Examiner:

FOR: LITHOGRAPHIC PRINTING PLATE

Date: December 14, 2001

The Hon. Commissioner of
Patents and Trademarks
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Preliminary to examination, please amend the herewith filed application as follows:

IN THE SPECIFICATION

Please amend the full paragraph on page 3, lines 4-19 to read as follows:

As a plate which does not need a process of development, a plate comprising a substrate having provided thereon an inorganic light absorbing layer comprising titanium or titanium oxide and an ink-repellent layer made of a silicone resin in this order is disclosed in Japanese Patent Laid-Open Publication No.

314934(1995), and also this plate has been already on the market.

In this plate the silicone resin layer repels an ink and becomes a non-image area, while an image area is formed by irradiation

with a near infrared light. The silicone resin layer is removed by the irradiation with a light to expose the ink-receptive substrate surface outside. In order to completely remove the silicone resin layer, wiping-off is necessary, and if the wiping-off of the silicone resin is insufficient, an ink receptivity on the irradiated area is not sufficient to cause defects in the image area, and printing is not made satisfactorily.

Please amend the paragraph beginning at Page 18, line 19 and ending at page 19, line 12, to read as follows:

Examples of the unsaturated acid derivatives having amide group include unsubstituted or substituted (meth)acrylamide, unsubstituted or substituted itaconic acid amide and unsubstituted or substituted fumaric acid amide. Examples of the unsubstituted or substituted (meth)acrylamides include (meth)acrylamide, N-methyl (meth)acrylamide, N,N-dimethyl (meth)acrylamide, N-ethyl (meth)acrylamide, N,N-diethyl (meth)acrylamide, N,N-dimethylaminopropyl (meth)acrylamide, N-isopropyl (meth)acrylamide, diacetone (meth)acrylamide, methylol (meth)acrylamide, methoxymethyl (meth)acrylamide, butoxymethyl (meth)acrylamide, propyl sulfonate (meth)acrylamide and (meth)acryloyl morpholine. The dibasic acid amide such as itaconic acid amide may be a monoamide or a diamide by amidation of one carboxyl group or both carboxyl groups. Examples of the unsaturated acid derivatives having glycidyl group include glycidyl (meth)acrylate and paravinyphenyl glycidyl ether.

Marked-up copies of the amended claims showing the changes made therein are attached hereto.

IN THE CLAIMS

Please cancel claims 6, 7, 13 and 14 in their entirety and without prejudice.

Please enter the following new claims:

--15. (New) The lithographic printing original plate as claimed in claim 4, wherein the photosensitive layer has a property which is locally foamed by irradiation with a light and changed from ink-repellent to ink-receptive.

16. (New) The lithographic printing original plate as claimed in claim 5, wherein the photosensitive layer has a property which is locally foamed by irradiation with a light and changed from ink-repellent to ink-receptive.

17. (New) A process for producing a lithographic printing plate, comprising irradiating the lithographic printing original plate of claim 5 with a light having a wavelength of 750 to 1100 nm.

18. (New) A process for producing a lithographic printing plate, comprising irradiating the lithographic printing original plate of claim 15 with a light having a wavelength of 750 to 1100 nm.

19. (New) A process for producing a lithographic printing plate, comprising irradiating the lithographic printing original plate of claim 16 with a light having a wavelength of 750 to 1100

nm.

20. (New) The lithographic printing plate as claimed in claim 11, wherein the photosensitive layer is locally foamed by irradiation with a light and changed from ink-repellent to ink-receptive.

21. (New) The lithographic printing plate as claimed in claim 12, wherein the photosensitive layer is locally foamed by irradiation with a light and changed from ink-repellent to ink-receptive.

22. (New) The lithographic printing plate as claimed in claim 12, wherein the light for the irradiation has a wavelength of 750 to 1100 nm.

23. (New) The lithographic printing plate as claimed in claim 20, wherein the light for the irradiation has a wavelength of 750 to 1100 nm.

24. (New) The lithographic printing plate as claimed in claim 21, wherein the light for the irradiation has a wavelength of 750 to 1100 nm.--

REMARKS

Entry of the foregoing amendment prior to examination of this application is respectfully requested in view of the following comments.

The amendments to the specification have been made to correct typographic errors in the specification.

No new matter has been entered.

Claims 6, 7, 13 and 14 have been cancelled and new claims 15-24 have been added. Accordingly, claims 1-5, 8-12 and 15-24 are pending in this application.

Claims 6, 7, 13 and 14 have been cancelled to eliminate improper multiple dependencies and to reduce the filing fee by eliminating the multiple dependent claim fee. New claims 15-24 correspond to claims 6, 7, 13 and 14 rewritten in proper single dependent form.

Specifically, claims 15 and 16 correspond to now cancelled claim 6, claims 17-19 correspond to now cancelled claim 7, claims 20 and 21 correspond to now cancelled claim 13, and claims 22-24 correspond to now cancelled claim 14.

No new matter has been added and applicant respectfully submits that this application is in condition for allowance and an early notice to that effect is earnestly solicited.

Respectfully submitted,

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Marked-up Paragraphs From Specification

Paragraph at page 3, lines 4-19:

As a plate which does not need a process of development, a plate comprising a substrate having provided thereon an inorganic light absorbing layer comprising titanium or titanium oxide and an ink-repellent layer made of a silicone resin in this order is disclosed in Japanese Patent Laid-Open Publication No. 314934(1995), and also this plate has been already on the market. In this plate the silicone resin layer repels an ink and becomes a non-image area, while an image area is formed by irradiation with a near infrared light. [In the printing, the] The silicone resin layer is removed by the irradiation with a light to expose the ink-receptive substrate surface outside. In order to completely remove the silicone resin layer, wiping-off is necessary, and if the wiping-off of the silicone resin is insufficient, an ink receptivity on the irradiated area is not sufficient to cause defects in the image area, and printing is not made satisfactorily.

Paragraph at Page 18, line 19 to page 19, line12

Examples of the unsaturated acid derivatives having amide group include unsubstituted or substituted (meth)acrylamide, unsubstituted or substituted itaconic acid amide[,] and unsubstituted or substituted fumaric acid

amide[, and unsubstituted or substituted phthalic acid amide]. Examples of the unsubstituted or substituted (meth)acrylamides include (meth)acrylamide, N-methyl (meth)acrylamide, N,N-dimethyl (meth)acrylamide, N-ethyl (meth)acrylamide, N,N-diethyl (meth)acrylamide, N,N-dimethylaminopropyl (meth)acrylamide, N-isopropyl (meth)acrylamide, diacetone (meth)acrylamide, methylol (meth)acrylamide, methoxymethyl (meth)acrylamide, butoxymethyl (meth)acrylamide, propyl sulfonate (meth)acrylamide and (meth)acryloyl morpholine. The dibasic acid amide such as itaconic acid amide may be a monoamide or a diamide by amidation of one carboxyl group or both carboxyl groups. Examples of the unsaturated acid derivatives having glycidyl group include glycidyl (meth)acrylate and paravinylphenyl glycidyl ether.